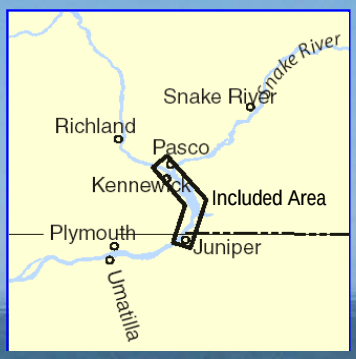
BookletChart™

Columbia River – Juniper to Pasco

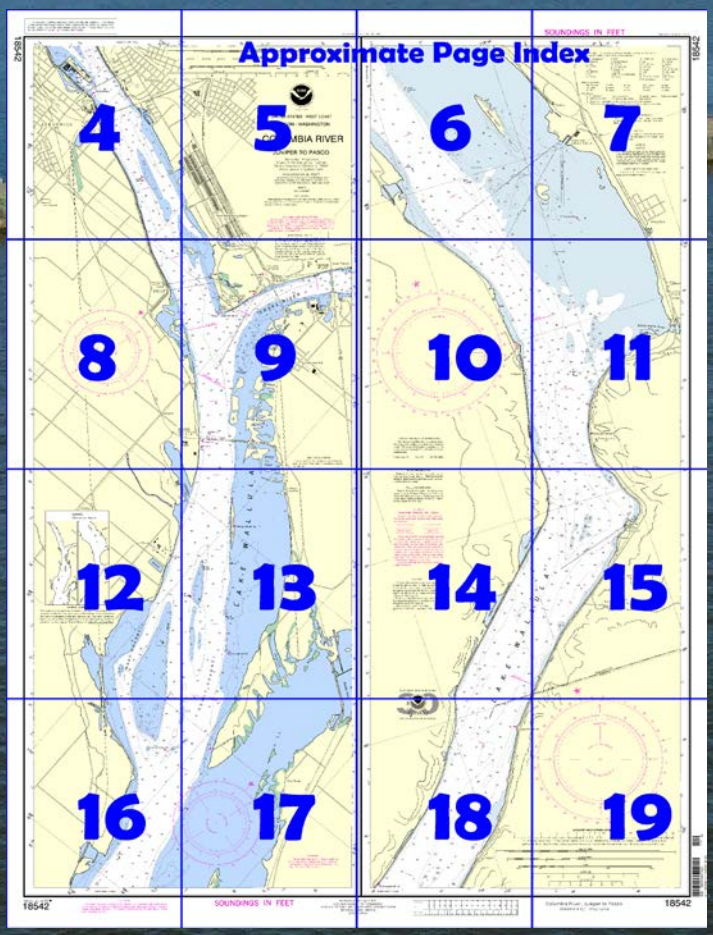
NOAA Chart 18542

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- *Complete, reduced-scale nautical chart*
- *Print at home for free*
- *Convenient size*
- *Up-to-date with Notices to Mariners*
- *Compiled by NOAA's Office of Coast Survey, the nation's chartmaker*



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

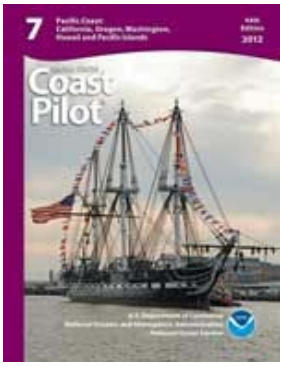
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18542.



(Selected Excerpts from Coast Pilot)
McNary Lock and Dam, 254.5 (292.9) miles above the mouth of the Columbia River and just above Umatilla, has a single lift lock with a vertical lift of about 75 feet. A **restricted area** is above the dam. (See **207.718**, chapter 2, for info concerning use, administration, and navigation of McNary Lock and Dam.) Depths and overhead clearances are at **normal pool level.**
Lake Wallula, the pool created by McNary Dam, provides slack-water navigation from McNary Dam to the junction with the **Yakima River**, a distance of about 37(43) miles. Depths in the lake are generally deep, however, there are several isolated shallow spots and rocky areas along the length of the lake. The channel through the lake is marked by aids to navigation from the Walla Walla River to Richland.
The **Port of Umatilla**, on the Oregon side, about 0.4 mile above the McNary Lock and Dam, owns a 230-foot port wharf with 800 feet of berthing space; reported depths of 20 feet are available alongside; a private company operates the wharf. A grain elevator, owned and operated by Pendleton Grain growers, Inc., has a loading rate of 20,000 bushels per hour; the grain elevator is just E of the port wharf. A barge wharf, used for receipt and shipment of petroleum products and liquid fertilizer, is just E of the grain elevator; the oil wharf is owned and operated by the Tidewater Barge Lines.
Hat Rock State Park, on the S side about 5.5 (6.3) miles above McNary Dam, has a public launching ramp and offers excellent protection for small craft. Gasoline is available here.
Port Kelley, on the E side of Columbia River, 16 (19.5) miles above McNary Dam, has a large grain elevator and facilities for handling bulk grain by rail, truck, or water. The elevator loading rate is 30,000 bushels per hour. Unlighted ranges lead clear of the rock and shoal area in the middle ground 0.4 mile W of the facility.
A small boat moorage is in the bight just NE of Port Kelley. Berths, electricity, gasoline, and water are available.
Walla Walla River enters Columbia River on the E side 18.4 (21.2) miles above McNary Dam. There is a public launching ramp on the S side of the river just E of the highway bridges at the entrance.
A grain wharf, at **Wallula Junction** just S of the Walla Walla River, has a grain elevator and barge loading spout with a loading rate of 20,000 bushels per hour; a reported depth of 20 feet is alongside the wharf. The wharf is owned and operated by Walla Walla Grain Growers, Inc. A barge wharf, at the **Port of Walla Walla** just S of **Attalia**, is owned and operated by Boise Cascade Corporation. The wharf ships wood pulp and receives caustic soda. A reported depth of 12 feet is alongside.
About 1.9 miles S of the Snake River mouth, on the W side of Lake Wallula, is the Unocal Corporation chemical plant; anhydrous ammonia and urea are received here by barge. The dock has 480 feet of berthing space and has a reported depth of 30 feet alongside. Two white ammonia storage tanks at this plant are prominent.
The Union Pacific Railroad bridge crossing Columbia River, 27 (31) miles above McNary Dam, has a vertical lift span with a clearance of 11 feet down and 72 feet up. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KTD-561. (See **117.1 through 117.59 and 117.1035**, chapter 2, for drawbridge regulations.)
Pasco, on the N side of the Columbia River 286 (329) miles above its mouth, is 32 (36.8) miles above McNary Dam.
The Pasco Yacht Basin, on the E side just below the railroad lift bridge, has berths, gasoline, diesel fuel, and marine supplies. Engine and electronic repairs can be made. An 8-ton hoist and a launching ramp are available at the basin.
Kennewick, on the S side of Columbia River opposite Pasco, has a grain elevator dock with 500 feet of berthing space and a reported depth of 14 feet alongside. At **Clover Island**, there is a large small-craft harbor. About 80 berths with electricity, gasoline, diesel fuel, water, and marine supplies are available. Hull, engine, and electronic repairs can be made. A 12-ton crane is at a marina occupying the center section of the island. A private yacht club is on the S side of the island.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Seattle	Commander 13th CG District Seattle, WA	(206) 220-7001

Table of Selected Chart Notes

HEIGHTS
Heights in feet

NOTE "B"
CAUTION
The depths of water on this chart except for the area above the Pasco highway bridge, have been determined from conditions existing prior to the filling of the Pool. Shoaler depths than charted may exist within the blue tinted areas particularly near the shoreline.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

NOAA VHF-FM WEATHER BROADCASTS
The National Weather Service station listed below provides continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Pendleton, OR	WXL-95	162.550 MHz

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.512" southward and 4.019" westward to agree with this chart.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

Mercator Projection
Scale 1:20,000 at Lat. 46°06'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
Soundings and clearances of bridges and overhead cables are referred to normal pool level which is 340 feet above mean sea level

COLUMBIA AND SNAKE RIVERS
Mileage distances along the Columbia and Snake Rivers are in Statute Miles. Distances along the Columbia River are eastward from the mouth and the Snake River are eastward from the junction of the Columbia River and are indicated thus:
Tables for converting statute miles to International Nautical miles are given in Coast Pilot 7.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Isc isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

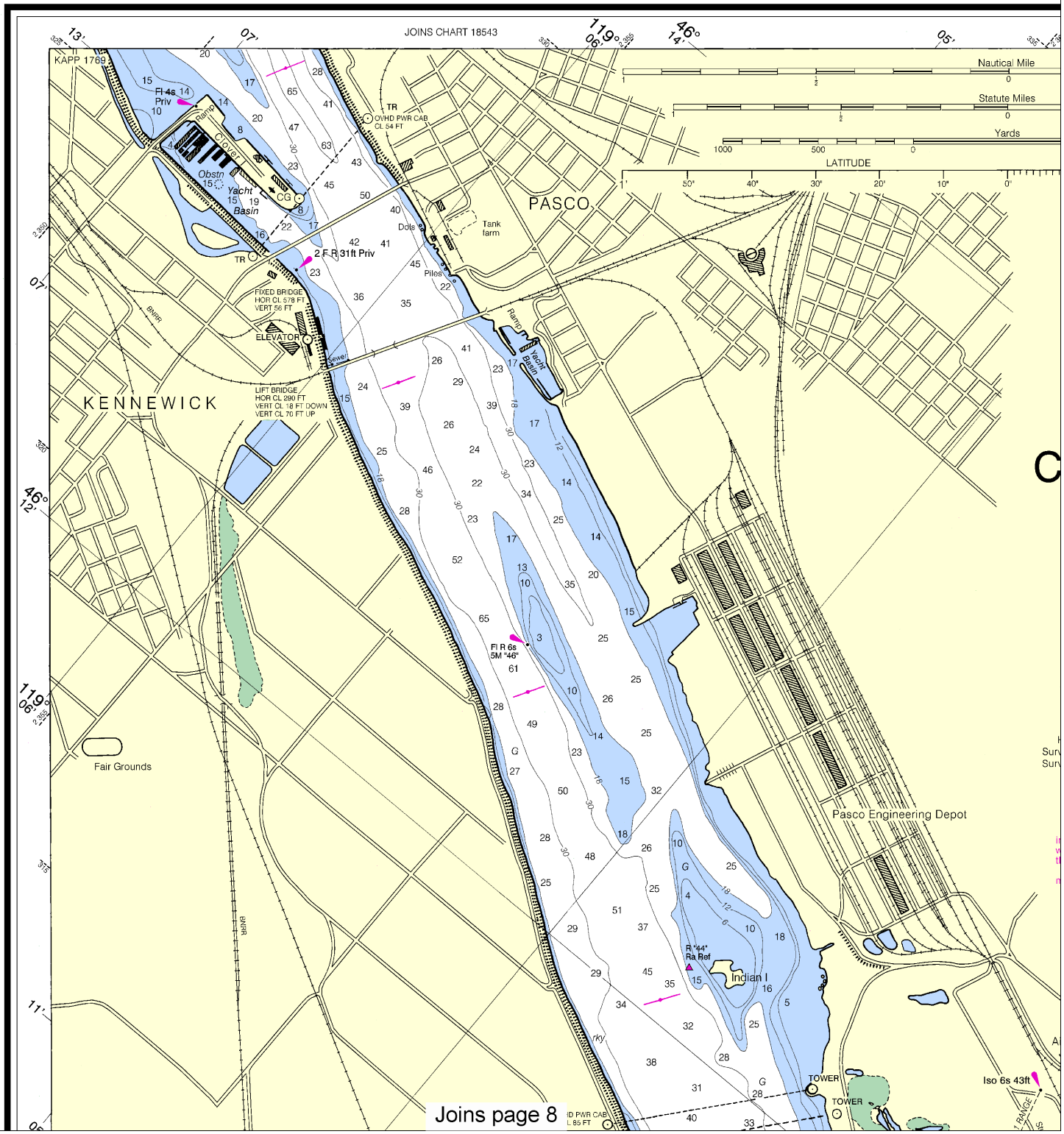
Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

18542



4

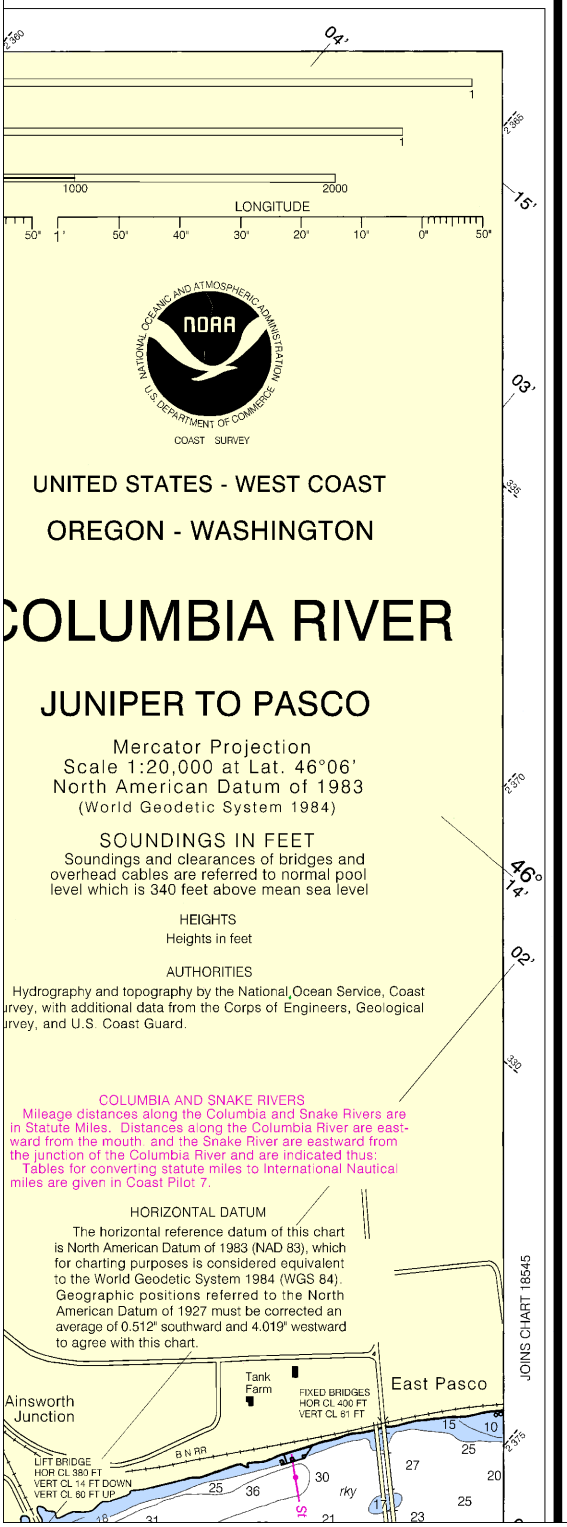
Note: Chart grid lines are aligned with true north.

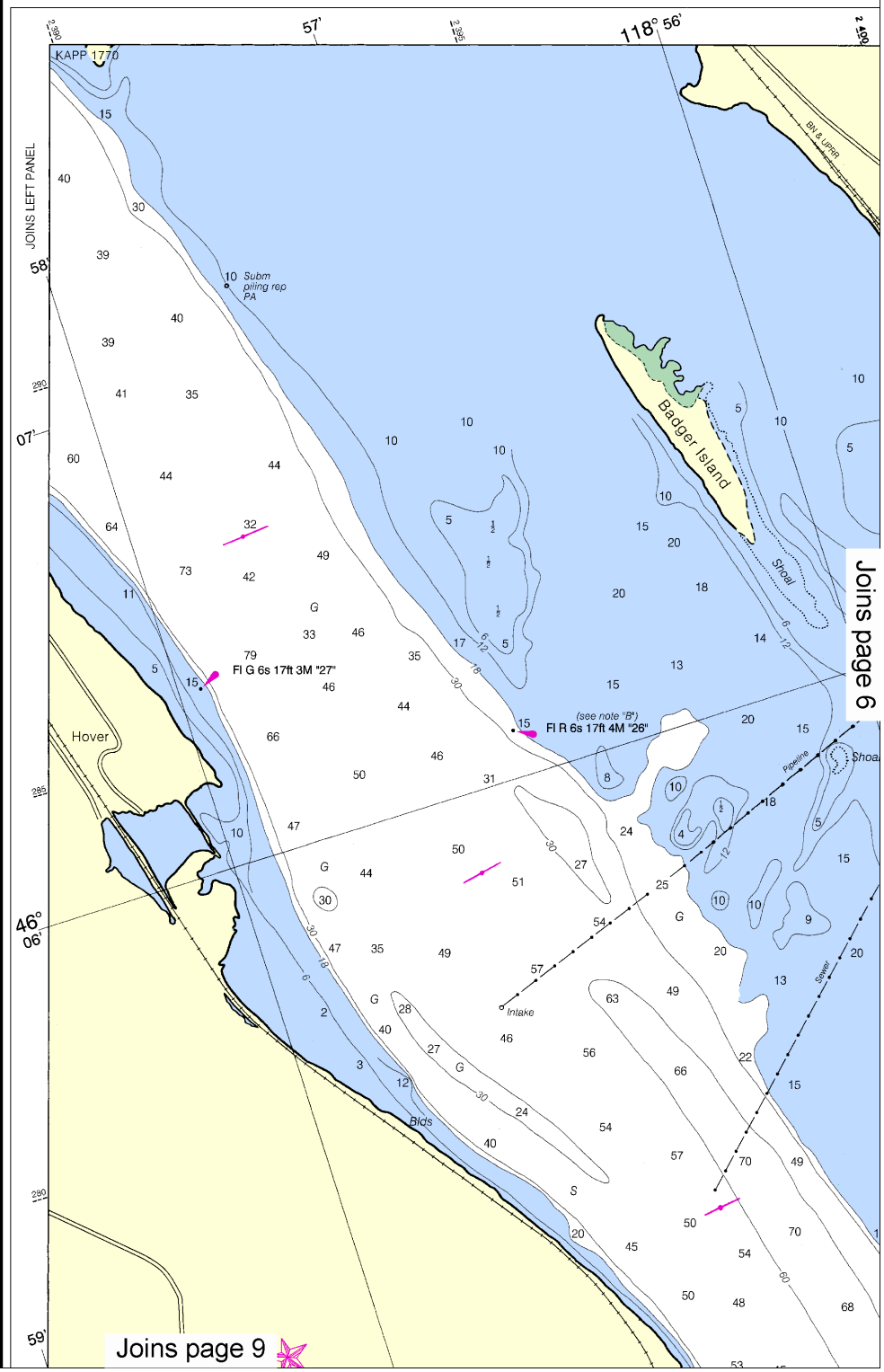
Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0, 1, 1 ½

Yards: 500, 0, 500, 1000, 1500, 2000, 2500

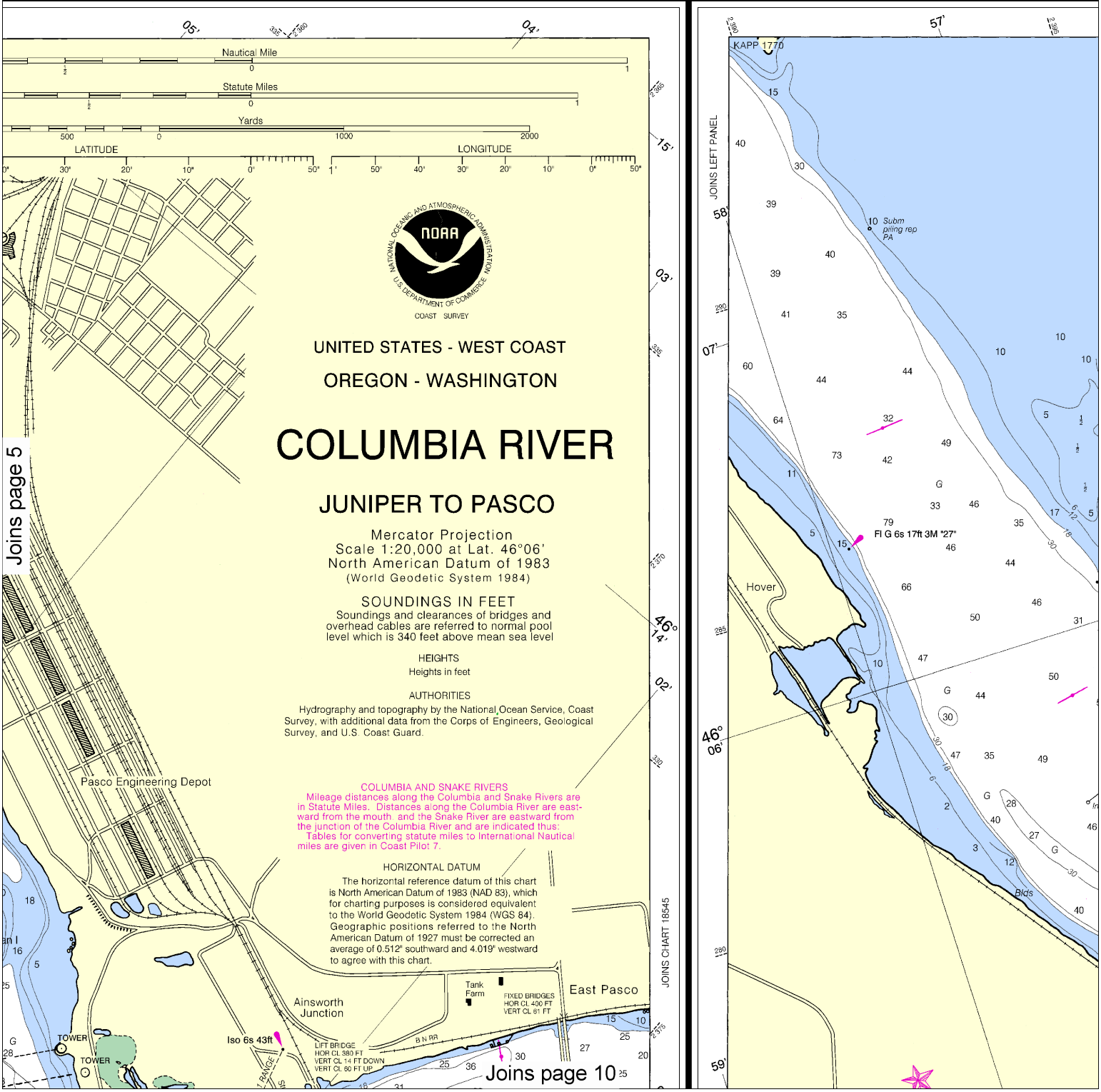
Formerly C&GS 6164, 1st Ed., Mar. 1960





This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:26667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

Formerly C&GS 6164, 1st Ed., Mar. 1960



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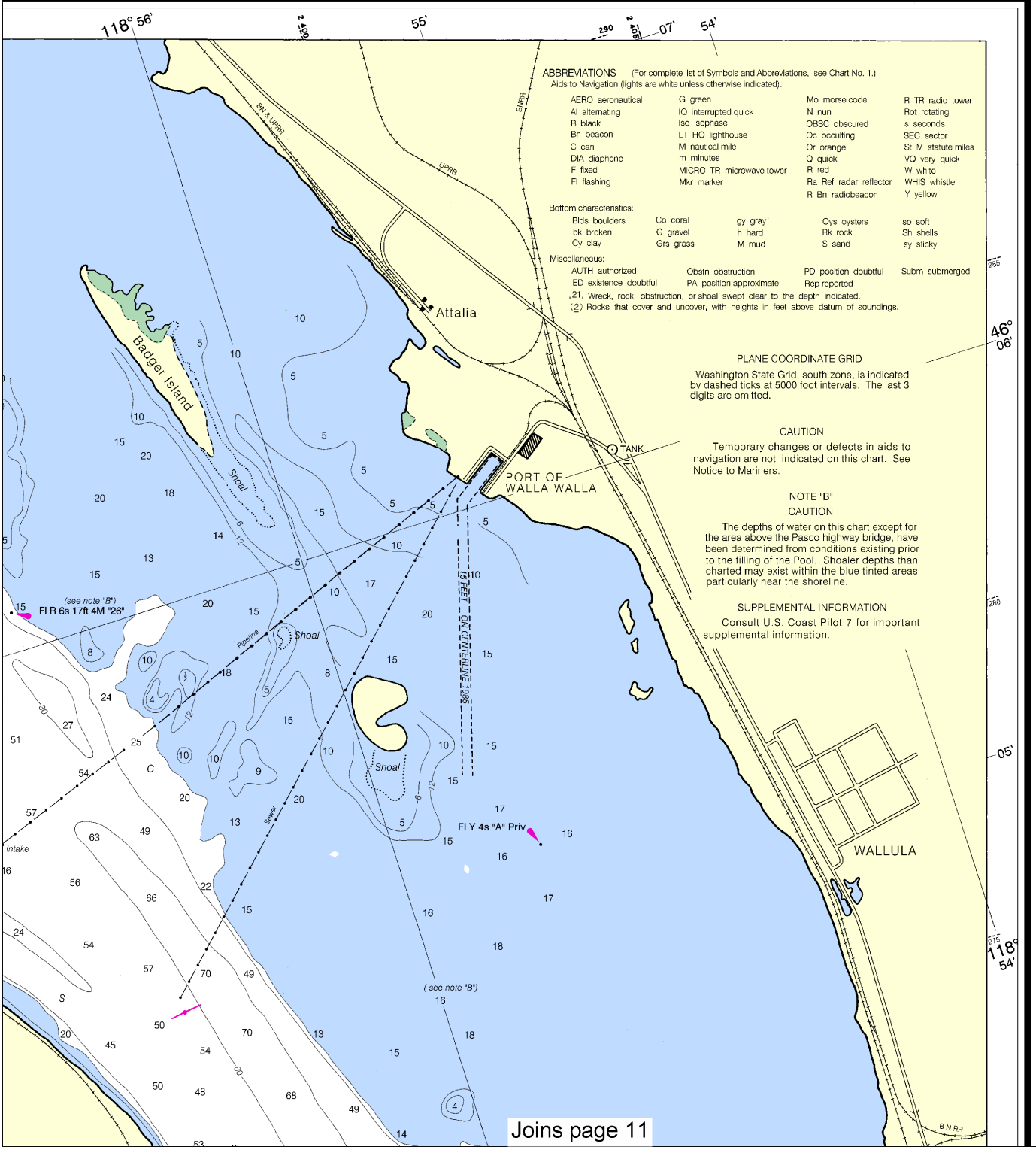
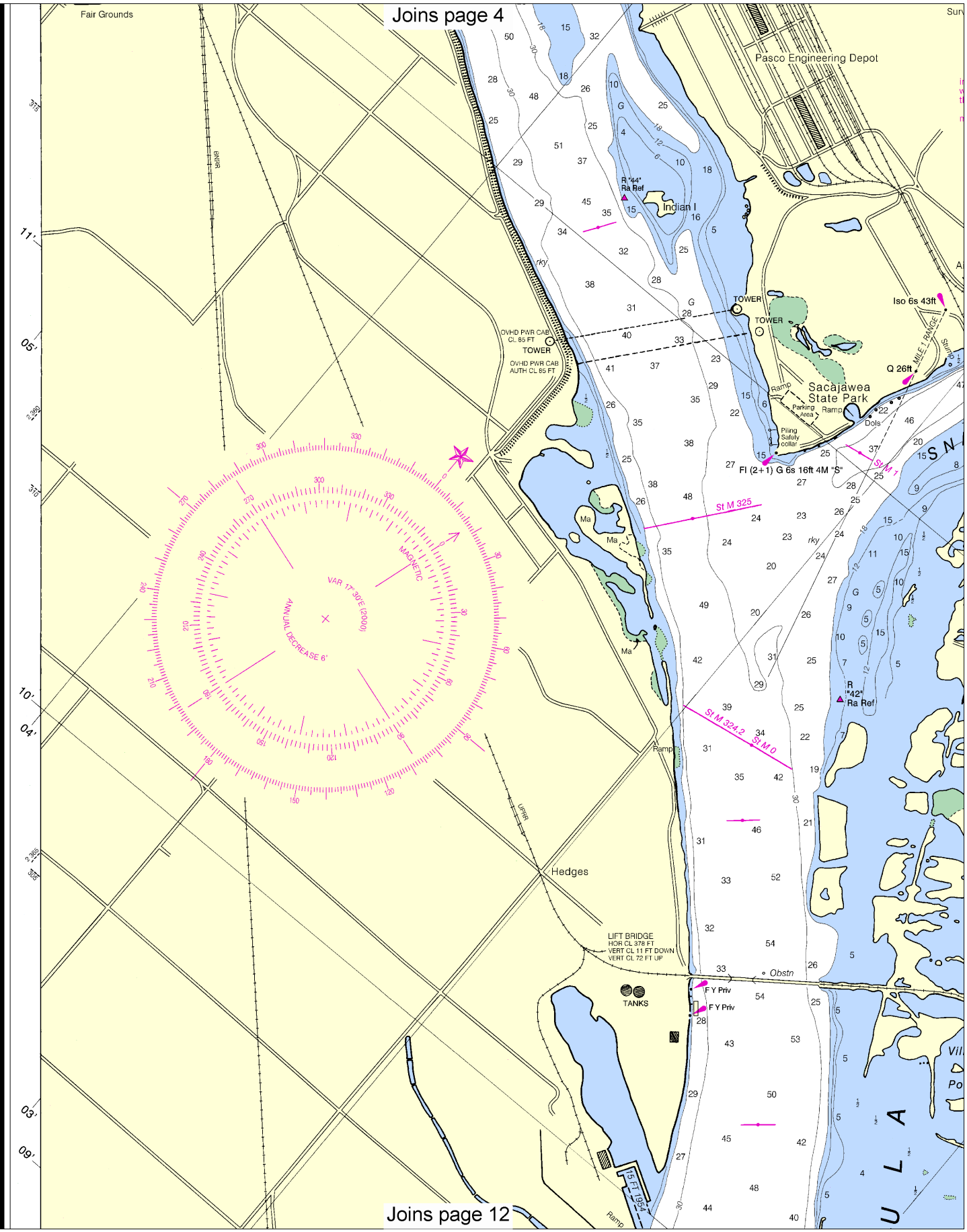
Yards: 500, 0, 500, 1000, 1500, 2000, 2500

SOUNDINGS IN FEET

18542





8

Note: Chart grid lines are aligned with true north.

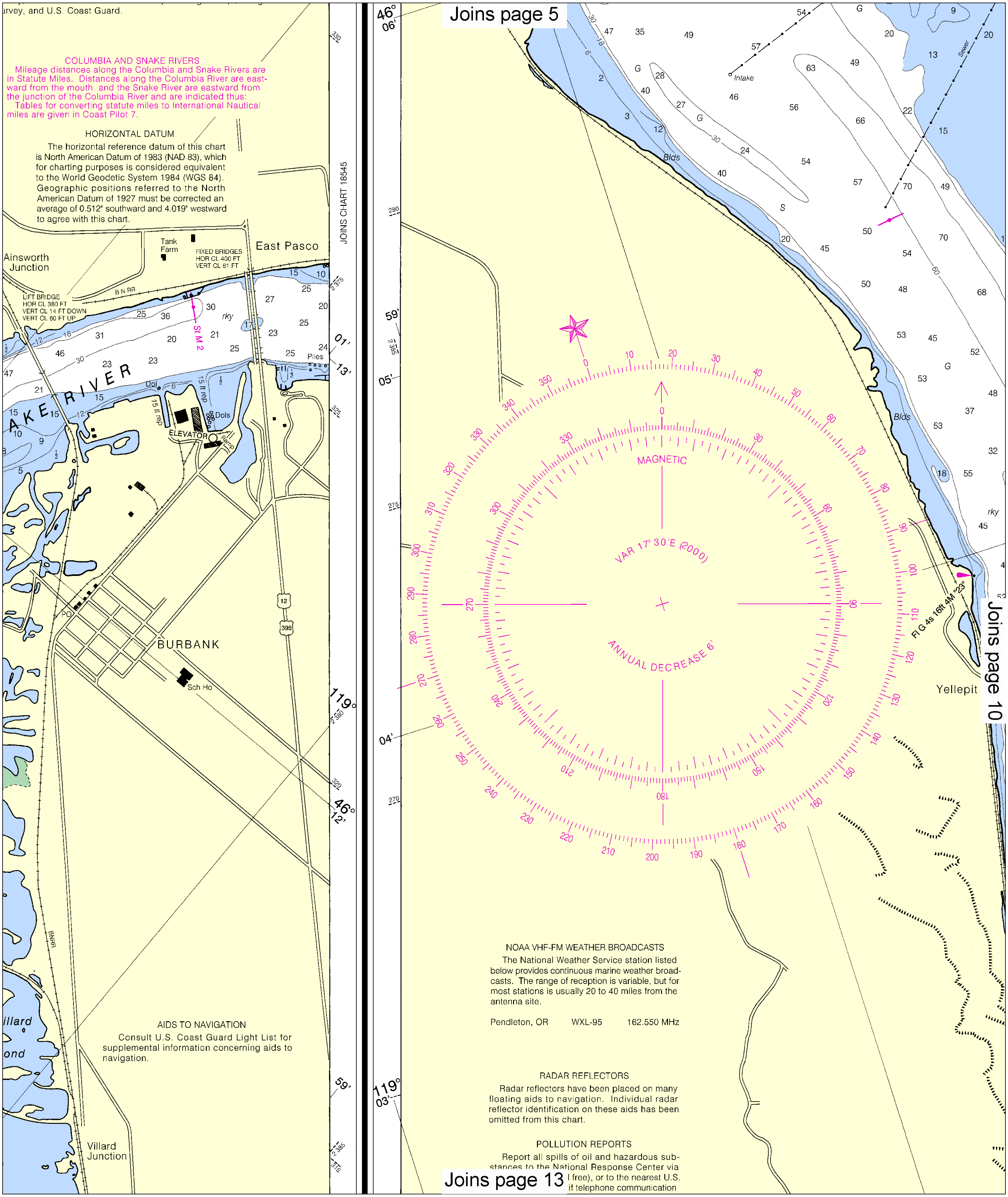
Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles

0 1 1½

Yards

500 0 500 1000 1500 2000 2500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JOINS CHART 18545
Tank Farm
FIXED BRIDGES HOR CL 400 FT VERT CL 61 FT
East Pasco
Ainsworth Junction
LIFT BRIDGE HOR CL 380 FT VERT CL 14 FT DOWN VERT CL 60 FT UP
B N RR
St M 2
SNAKE RIVER
Piles
Dol
Dols
15 ft rep
ELEVATOR
Ramp
PO
BURBANK
Sch Ho
BNRR
illard ond
Villard Junction
AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.
Joins page 5
Intake
Sewer
Blds
rky
MAGNETIC
VAR 17° 30'E (2000)
ANNUAL DECREASE 6'
Fl G 4s 16ft 4M "23"
Yellepit
Joins page 10
NOAA VHF-FM WEATHER BROADCASTS
The National Weather Service station listed below provides continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.
Pendleton, OR WXL-95 162.550 MHz
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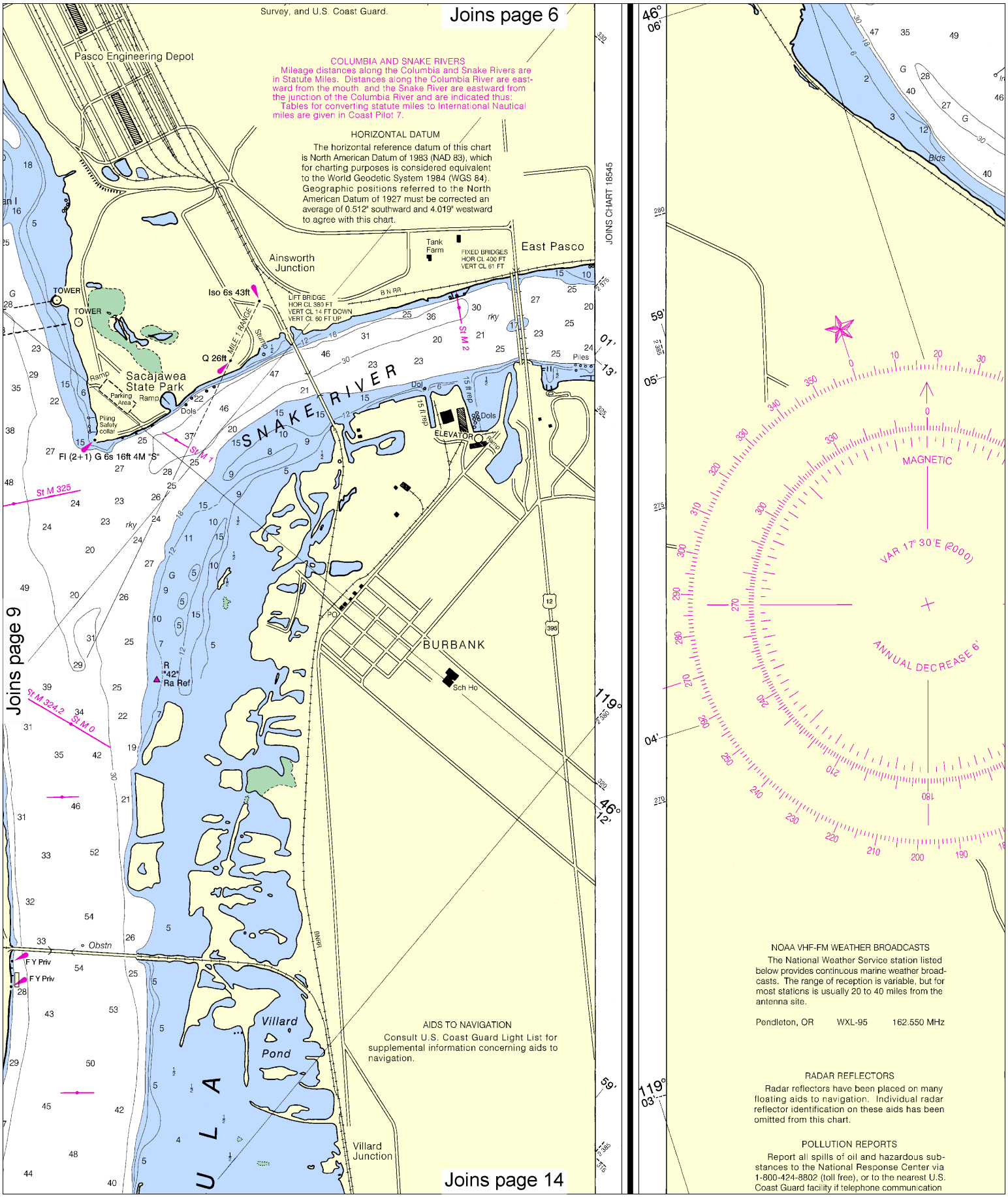
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.
POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via
l free), or to the nearest U.S.
if telephone communication
Joins page 13



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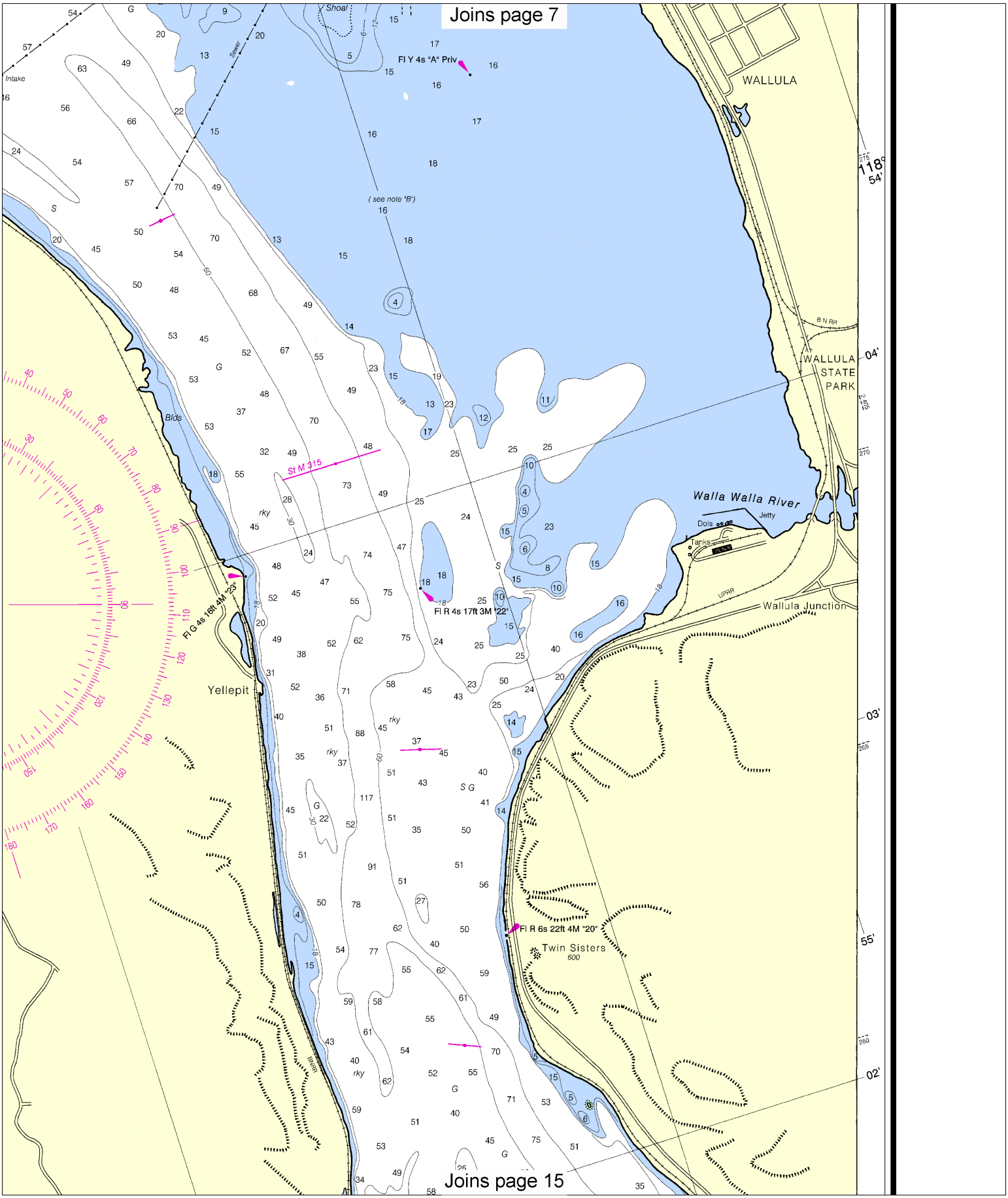
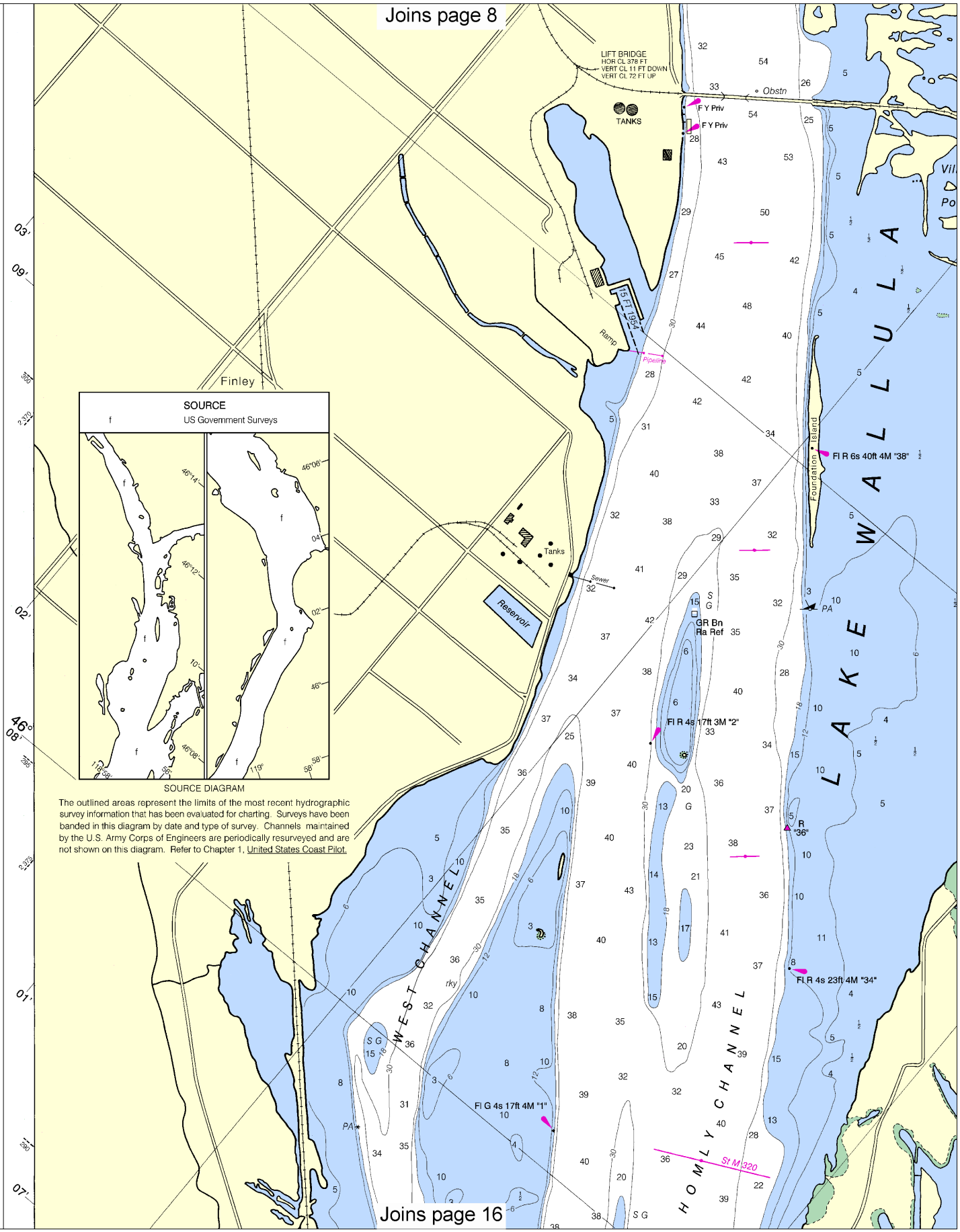
Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500


Joins page 7
WALLULA
Fl Y 4s "A" Priv
(see note "B")
WALLULA STATE PARK
Walla Walla River
Jetty
Dols
Tanks
Wallula Junction
St M 315
Fl G 4s 16ft 4M "23"
Fl R 4s 17ft 3M "22"
Yellepit
Fl R 6s 22ft 4M "20"
Twin Sisters
600
Joins page 15
118°
54'
04'
03'
55'
02'

Joins page 8



Joins page 16

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles
0 1 1½

Yards
500 0 500 1000 1500 2000 2500

Joins page 9

AIDS TO NAVIGATION

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CAUTION

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Pipeline Area *Cable Area*

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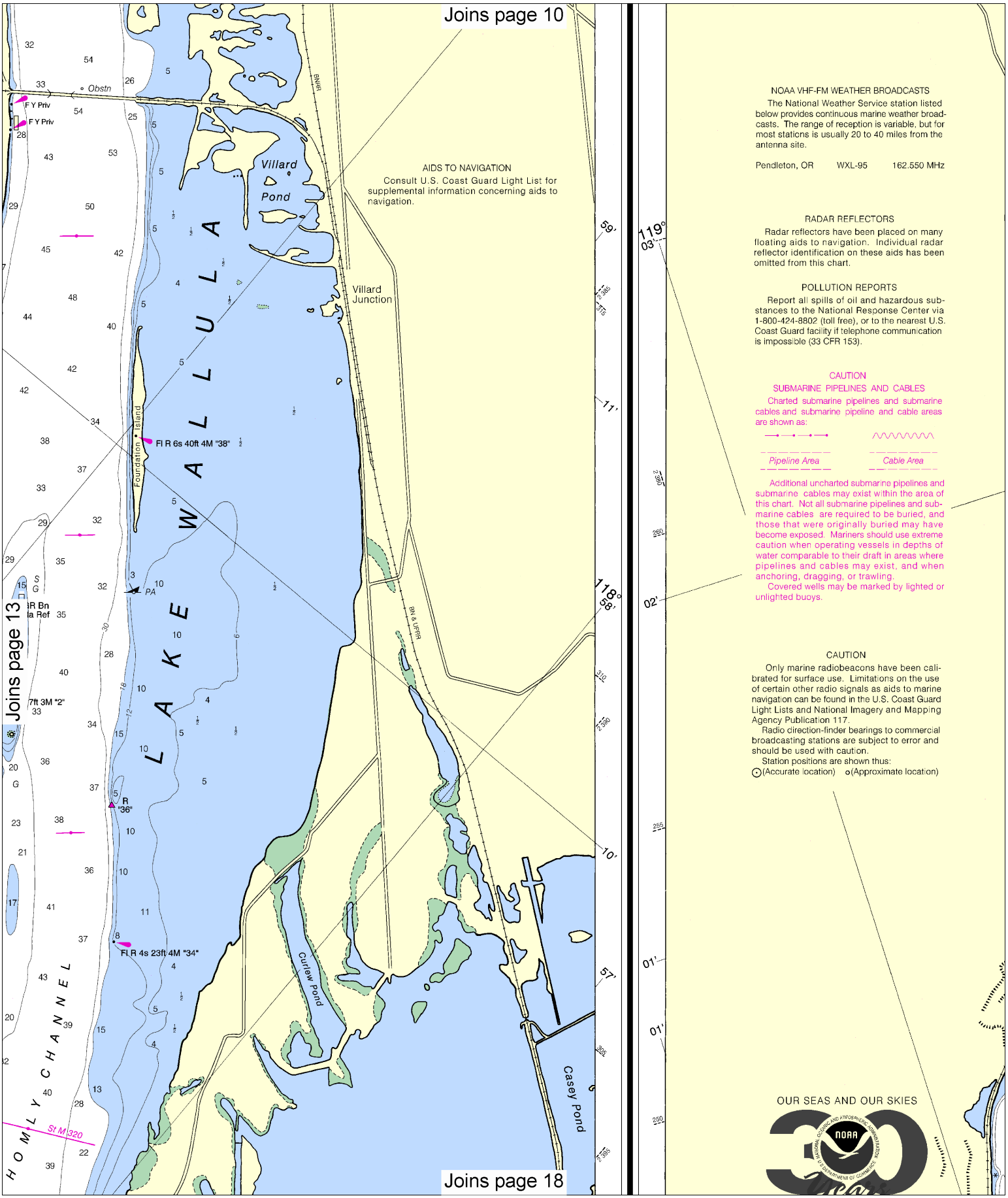
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

OUR SEAS AND OUR SKIES

Joins page 17

Joins page 14

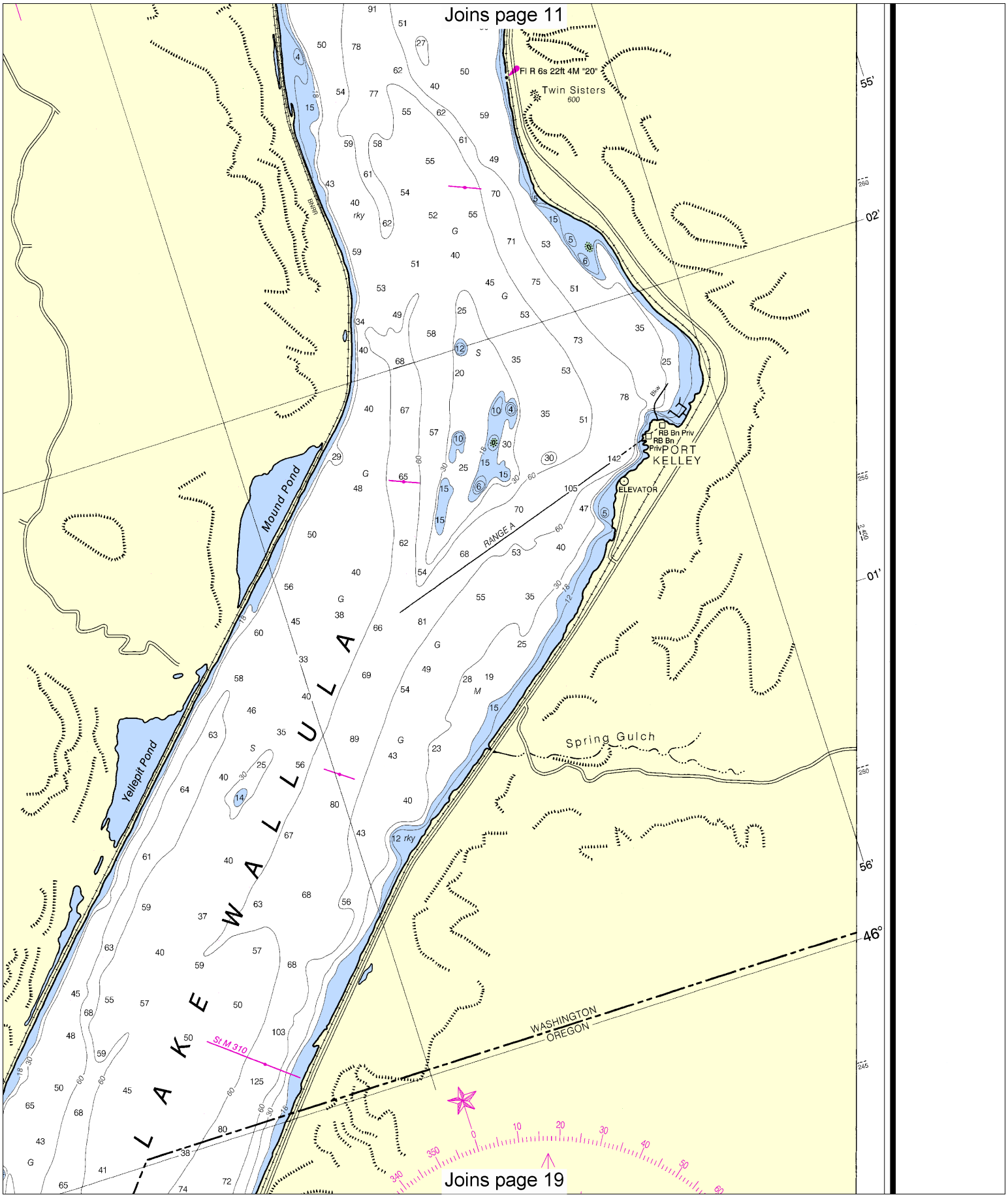


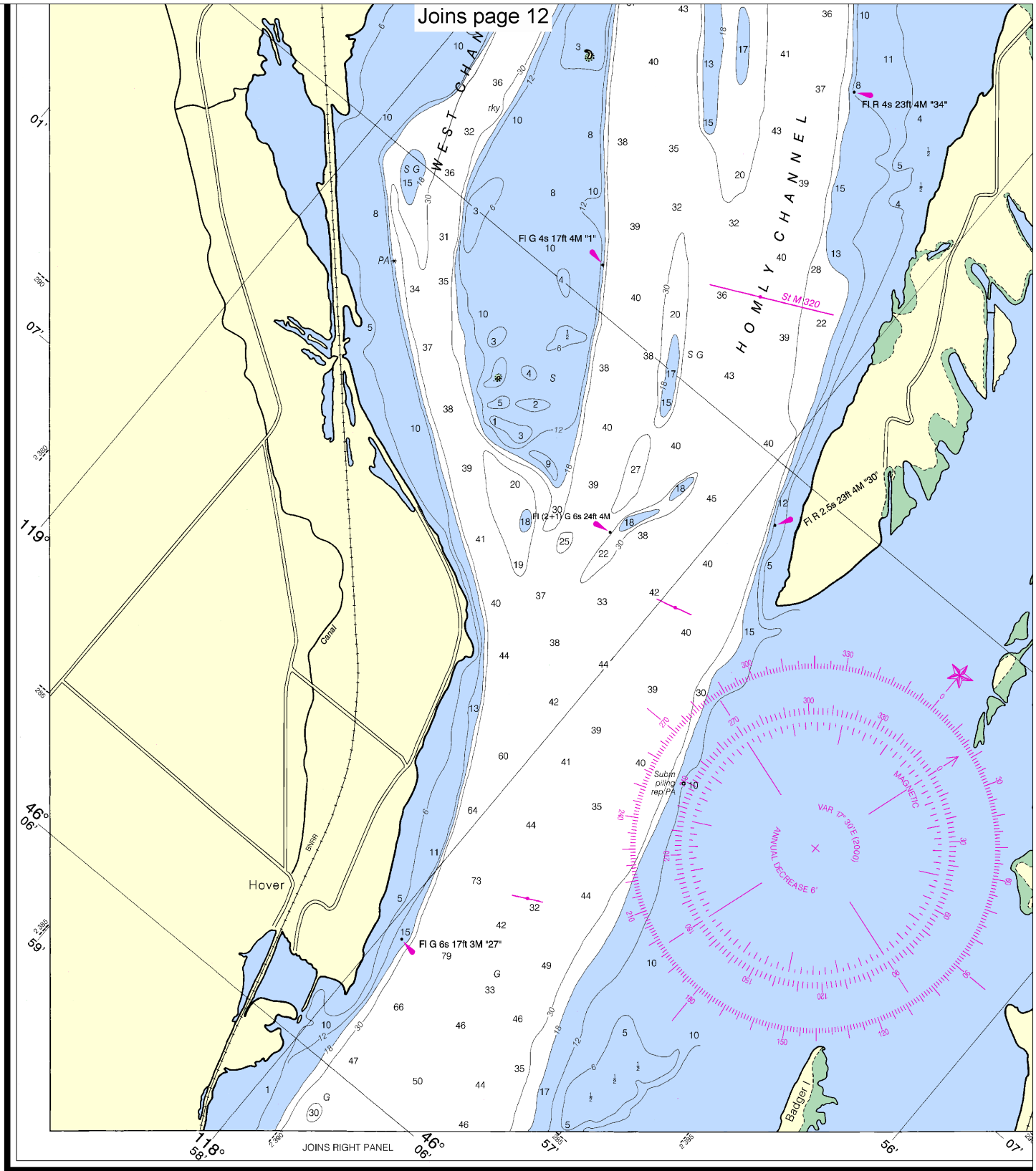
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500


Joins page 11
Fl R 6s 22ft 4M "20"
Twin Sisters
600
Mound Pond
Yellepit Pond
LAKE WALLULA
RANGE A
PORT KELLEY
RB Bn Priv
RB Bn
Priv
ELEVATOR
Spring Gulch
St M 310
WASHINGTON
OREGON
12 rky
Joins page 19



10th Ed., Jan. 08/00 ■

18542

CAUTION

This chart has been corrected from the Notice to Mariners published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.

SOUNDINGS IN

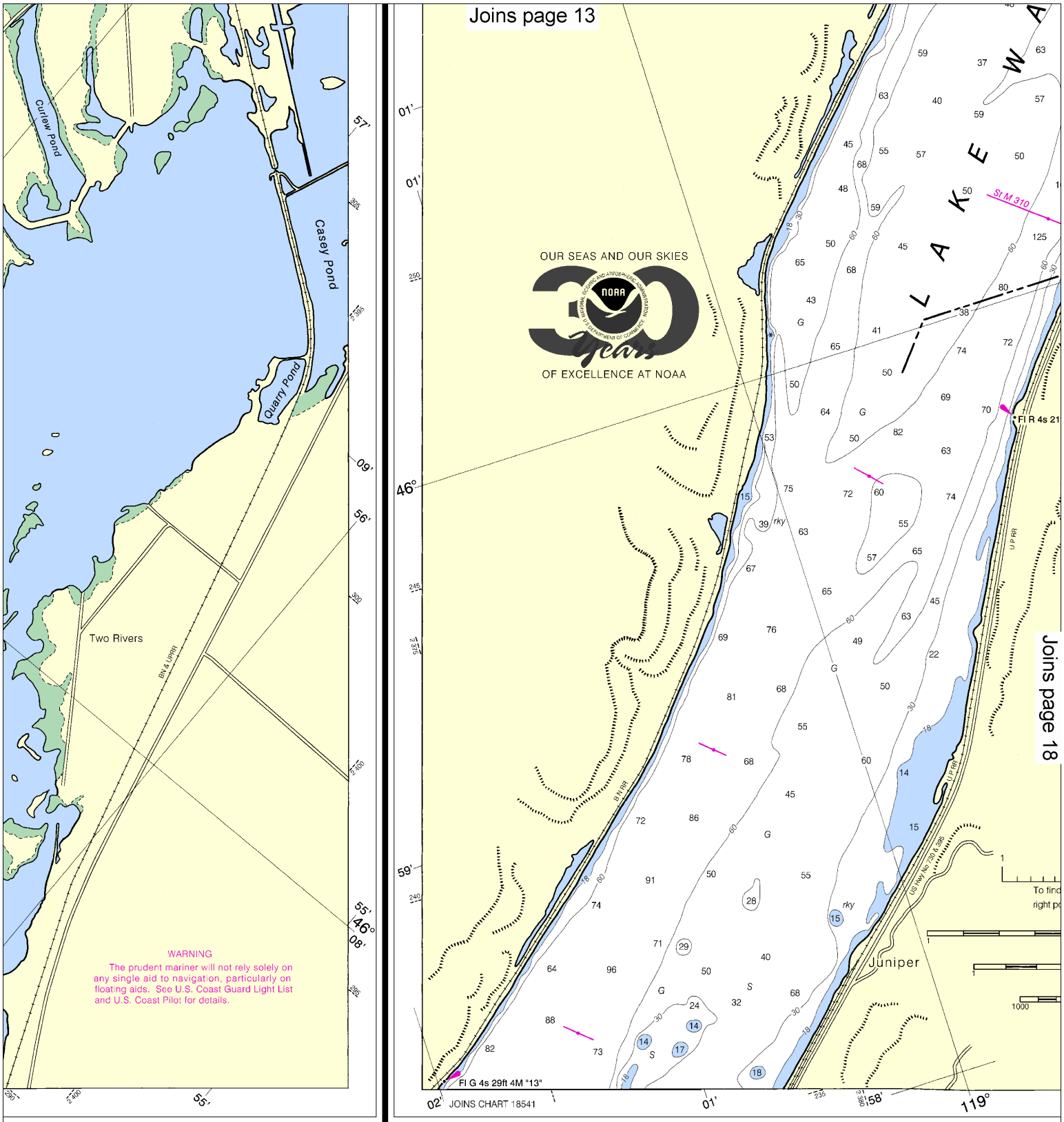
16

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

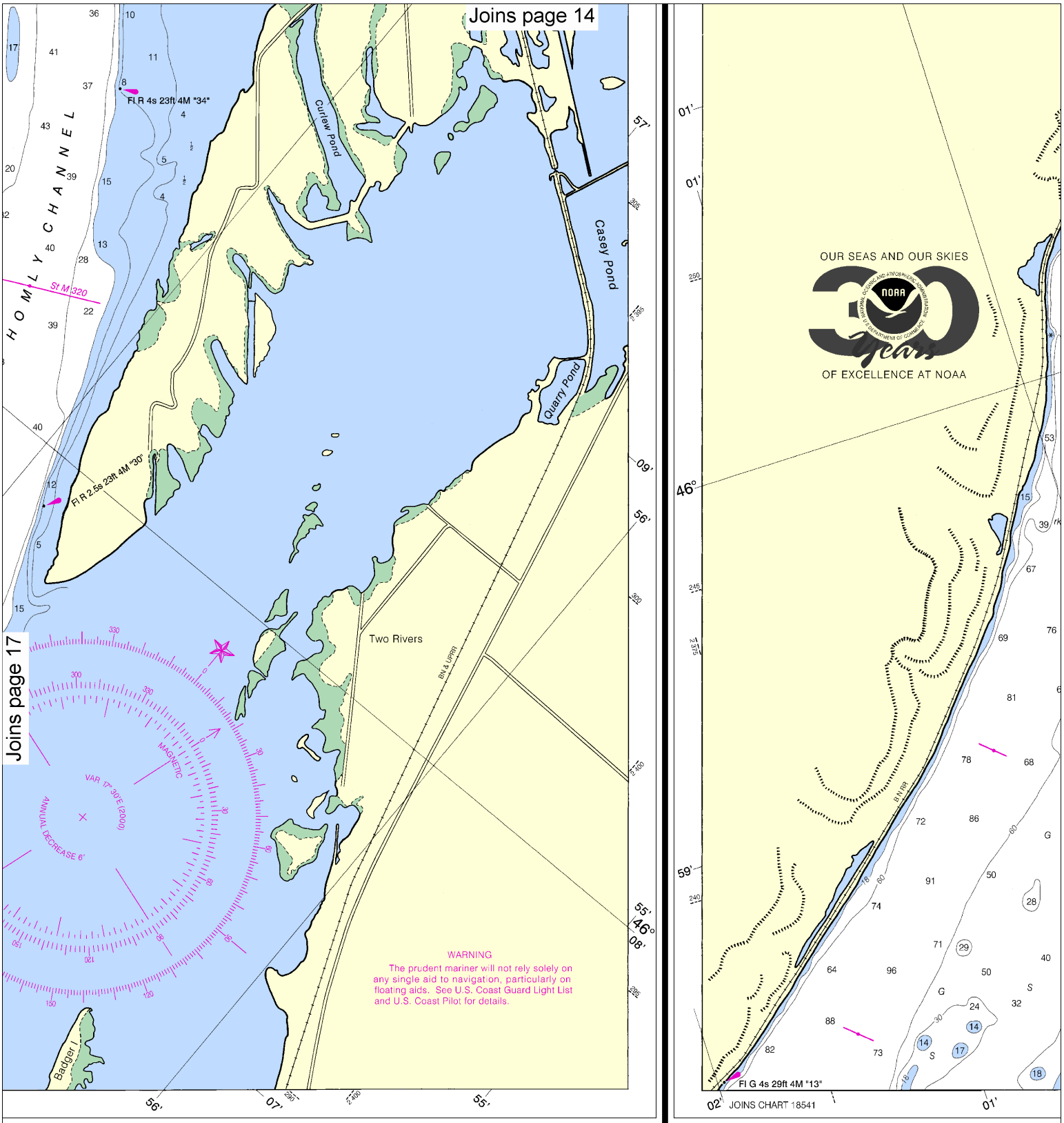
Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500



N FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

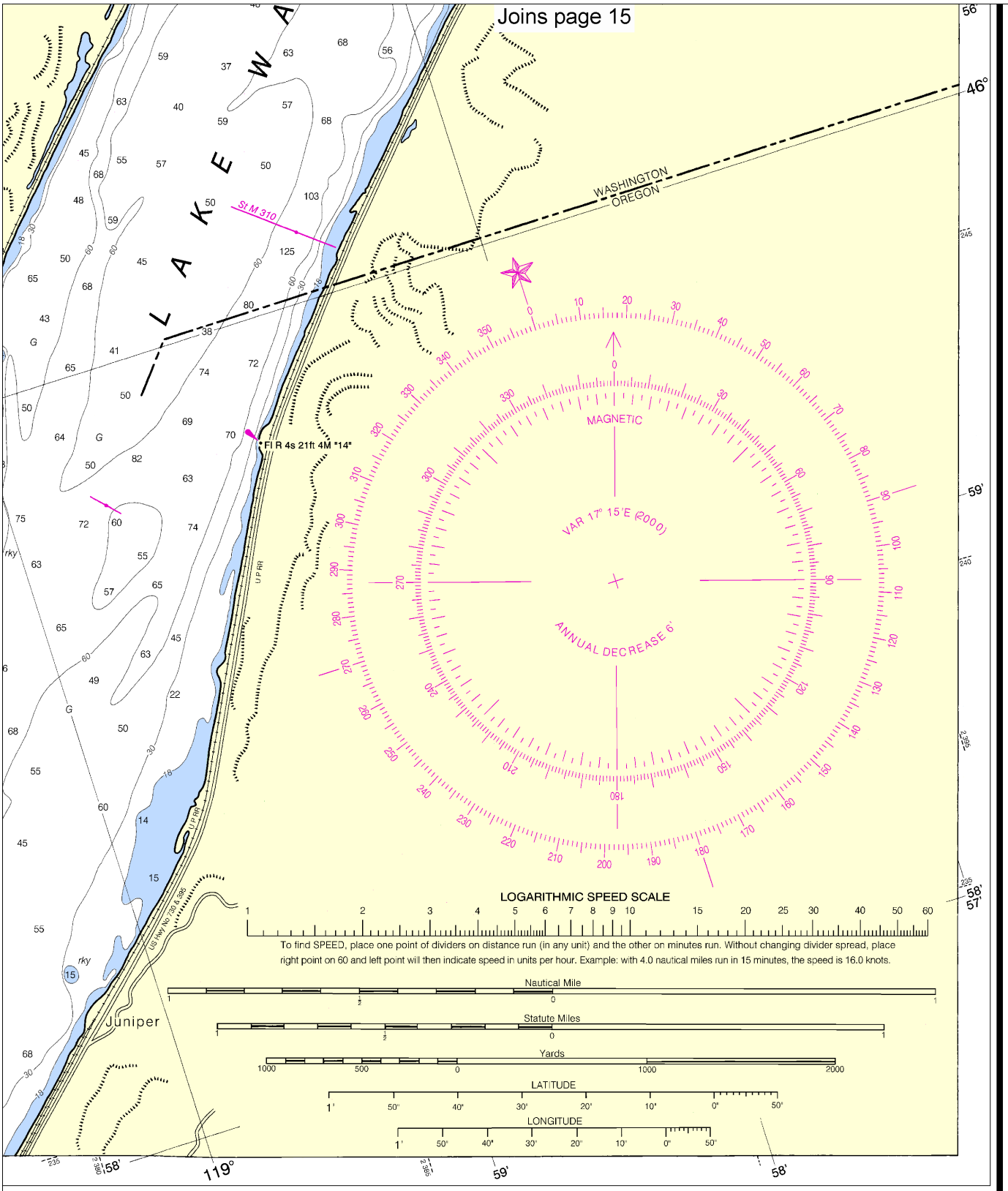
FATHOMS	1	2	3	4	5	6	
FEET	6	12	18	24	30	36	
METERS	1	2	3	4	5	6	7 8 9 10 11 12

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:20,000~~ See Note on page 5.

Nautical Miles: 0 — 1 — 1 ½

Yards: 500 — 0 — 500 — 1000 — 1500 — 2000 — 2500



ED. NO. 10

NSN 7642014011622 NIMA REFERENCE NO. 18XHA18542

Columbia River, Juniper to Pasco

SOUNDINGS IN FEET - SCALE 1:20,000

18542

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information	—	**http://www.nauticalcharts.noaa.gov**
Online chart viewer	—	**http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html**
Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
Coast Pilot online	—	**http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm**
Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

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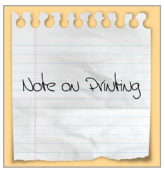

This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

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